

REMARKS/ARGUMENTS

These Remarks are responsive to the Office Action mailed October 15, 2004 ("Office Action"). Claims 1-22 are pending in the application. Claims 12 and 14-22 are withdrawn pursuant to 37 C.F.R. § 1.142(b). Claims 1, 5, and 6 are amended to correct minor informalities. Applicant respectfully requests reconsideration for at least the following reasons.

The Invention

The claimed invention is directed a composition effective for cold preparation of laminated composite materials comprising: (a) at least one polar aprotic solvent (TPA); (b) at least one ether (TE); and (c) at least one activator (TA). The ether (TE) is selected from the group consisting of ethers, ether-esters, and ether-ketones having: a molar volume less than 200 and a molecule devoid of a hydroxyl function. The activator (TA) comprises at least one reactive -NH₂ and/or -NH- nitrogenous function and has a molar volume less than 100. The components (a), (b), and (c) are present in proportions effective for cold preparation of laminated composite materials based on polyester resins in order to confer to them without preliminary sanding or abrasion a surface state suitable for adhesive bonding with a polyurethane adhesive.

Claim Objections

The Office Action notes an informality in claim 6 at line 10 and suggests changing "f the composition" to "of the composition." Claim 6 is amended to implement the examiner's suggestion.

Obviousness -- 35 U.S.C. § 103(a)

The Office Action rejects claims 1-11 and 13 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,001,192 ("Lallier") in view of U.S. Patent 5,599,954 ("Mitsubishi").

"To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to

combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." Manual of Patent Examining Procedure § 2143.03 (8th ed., rev. 2, May 2004) (hereinafter "M.P.E.P.").

Lallier discloses paint stripping compositions comprising (a) an aprotic polar solvent, and (b) an ether. Lallier also teaches conventional additives for its paint stripping composition, one of which is an activator. The activator in Lallier is entirely optional ("may also include conventional additives" col. 2, ll. 38-48) and is listed among large numbers of possible additives such as co-solvents, fire-proofing agents, thickeners, stabilizers, surfactants, evaporation inhibitors, and any additive that is not a chlorine-containing solvent. Lallier, col. 2, ll. 38-48. Moreover, as acknowledged in the Office Action, Lallier does not identify any particular activators for use with its paint stripping composition. Thus, Lallier differs from the claimed invention in at least the following respects. Lallier fails to teach or suggest "(c) at least one activator (TA) comprising at least one reactive -NH₂ and/or -NH- nitrogenous function, of molar volume less than 100" as required by the claims. In addition, Lallier fails to teach or suggest a composition "wherein (a), (b), and (c) are present in proportions effective for cold preparation of laminated composite materials based on polyester resins in order to confer to them without preliminary sanding or abrasion a surface state suitable for adhesive bonding with a polyurethane adhesive."

The Office Action turns to Mitsuhashi for a specific teaching of an activator. Mitsuhashi relates to N-substituted-7-amino-5-hydroxy-3-oxoheptanoic acid derivatives and a method for producing the same. Mitsuhashi, col. 1, ll. 8-10. According to Mitsuhashi, N-substituted-7-amino-5-hydroxy-3-oxoheptanoic acid derivatives are useful as synthetic intermediates for preparing 3-hydroxy-3-methylglutaryl coenzyme A (HMG-CoA) reductase inhibitors known as antilipemic agents, namely, trans-6-[2-substituted pyrrole-1-yl) alkyl]-4-hydroxypyran-2-one derivatives. Mitsuhashi, col. 1, ll. 10-15. In particular, the Office Action points to col. 6, ll. 59-65 to supply the activator not taught by Lallier. The Office Action points to the imidazole ester activator taught for converting the N-substituted-5-amino-3-hydroxypentanoic acid of the general formula (2) with a metal salt of malonic acid monoester of general formula (3) to produce compound (1), which is a synthetic intermediate for HMG-CoA reductase inhibitors.

The Office Action concludes based on the teachings of Lallier and Mitsushashi that the claimed invention is obvious asserting that "it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have employed the activators, as taught by Mitsushashi, in the composition of Lallier, because the use of an ether activator,¹ such as imidazole, would have activated the reaction forward and would have yielded the product better." Office Action, page 3. Applicant respectfully disagrees and submits that the Office Action has failed to set forth a prima facie showing of obviousness.

There is no motivation to select the claimed activator, namely, an activator comprising at least one reactive -NH₂ and/or -NH- nitrogenous function of molar volume less than 100 from a teaching relating to HMG-CoA reductase inhibitors and then combine it with the paint stripping composition of Lallier. The asserted motivation (i.e., to activate the reaction forward) applies equally to all activators and would not lead a person of ordinary skill in the art to the claimed invention. Furthermore, the divergent nature of Lallier and Mitsushashi suggests that nothing more than hindsight was used to identify Mitsushashi as relevant to the claimed invention. The Office Action fails to show that Lallier or Mitsushashi are within the field of endeavor or related to the problem solved by the claimed invention. Lallier is directed to removing paints and coatings from surfaces and Mitsushashi is directed to intermediates for forming HMG-CoA reductase inhibitors. Neither of these teachings are relevant to the "cold preparation of laminated composite materials based on polyester resins in order to confer to them without preliminary sanding or abrasion a surface state suitable for adhesive bonding with a polyurethane adhesive" as is set forth in the claims. "The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure." M.P.E.P. § 2143 (citing In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). Accordingly, the rejection of claims 1-11 and 13 under 35 U.S.C. § 103(a) as being unpatentable over Lallier in view of Mitsushashi must be withdrawn.

Claims 6-8 further distinguish over the teachings of Lallier and Mitsushashi for the following reasons. The Office Action asserts that Lallier teaches that the aprotic polar solvent

¹ It is noted that Mitsushashi teaches an "ester activator" and not an "ether activator" as stated in the Office Action. See Mitsushashi, col. 6, line 63.

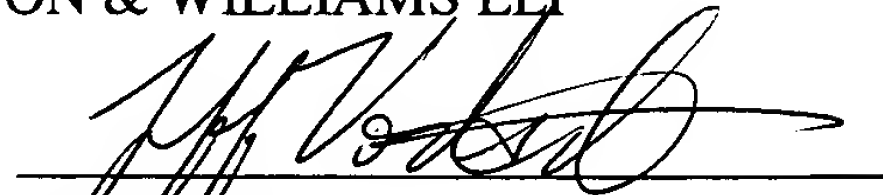
and the ether are present in a volume ratio of 50/50 referring to col. 2, line 10 of Lallier. However, neither claim 6 nor claims 7-8 are directed to a volume ratio of the aprotic polar solvent and the ether that corresponds to a 50/50 ratio. In particular, the ratios in claim 6 specify the composition of the aprotic polar solvent, the ether, and the activator. However, nothing in the cited art teaches or even remotely suggests the amount of activator to use. With respect to claim 7 (and 8, which depends from 7), which specifies a ratio of dimethylsulfoxide (DMSO) and dimethylformamide (DMF), the Office Action cites the 50/50 ratio of aprotic polar solvent to ether taught by Lallier. Applicant respectfully submits that the ratio of aprotic polar solvent to ether is completely irrelevant to the claimed ratio of polar aprotic solvents DMSO and DMF. "To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." M.P.E.P. § 2143.03 (citing In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)). The limitations of claims 6-8 are not found in the prior art. Accordingly, the rejection of claims 6-8 under 35 U.S.C. § 103(a) as being unpatentable over Lallier in view of Mitsuhashi must be withdrawn.

Applicant submits that this response addresses all of the issues raised in the Office Action. Applicant submits that claims 1-22 are in condition for allowance and notice to that effect is hereby solicited. Should any issues remain to be discussed in this application, the Examiner is invited to contact the undersigned by telephone.

In the event any variance exists between the amount authorized to be charge to the Deposit Account and the Patent Office charges for reconsideration of this application, please charge or credit any difference to the undersigned's Deposit Account No. 50-0206.

Respectfully submitted,
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